We claim:-

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- A process for improving the printability of paper and paper products when printing with the aid of the ink-jet printing method by treating the paper or the paper products with aqueous solutions of cationic polymers, wherein cationic polymers having a charge density of at least 3 meq/g are used as the sole treatment composition in aqueous solution and is applied in an amount of from 0.05 to 5 g/m² to the surface of the paper or of the paper product.
- 10 2. The process according to claim 1, wherein the charge density of the polycation in the cationic polymer is from 3.5 to 23 meg/g.
 - 3. The process according to claim 1, wherein the charge density of the polycation in the cationic polymer is from 8 to 20 meq/g.
 - 4. The process according to any of claims 1 to 3, wherein the polycation of the cationic polymer has a molar mass M_w of at least 10 000.
- 5. The process according to any of claims 1 to 4, wherein the cationic polymers are selected from the group consisting of the polymers comprising vinylamine units, polymers comprising ethylenimine units, polymers comprising diallyldimethylammonium chloride units, polymers comprising quaternized dimethylaminoethyl(meth)acrylate units, polymers comprising dimethylaminoethyl(meth)acrylamide units, condensates which comprise ethylenediamine or diethylenetriamine in the form of condensed units and polyamidoamines crosslinked with epichlorohydrin.
 - 6. The process according to any of claims 1 to 5, wherein the cationic polymers used are hydrolyzed homo- or copolymers of N-vinylformamide having a degree of hydrolysis of from 20 to 100%, polyethylenimines, polydiallyldimethylammonium chlorides and/or polyamidoamine resins crosslinked with epichlorohydrin.
- 7. The process according to any of claims 1 to 6, wherein the aqueous solution of the cationic polymers is applied to the paper with the aid of a size press, a film press, a spraying means, a coating unit or a paper calender.
 - 8. A paper which is obtainable by the process according to claims 1 to 7.
- 40 9. The use of an aqueous solution which comprises cationic polymers having a charge density of at least 3 meq/g as the sole treatment composition, for

application to the surface of paper or paper products in an amount of from 0.05 to 5 g of cationic polymer per m² for improving the ink-jet printability of paper and paper products.

We claim:-

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- 1. A process for improving the printability of paper and paper products when printing with the aid of the ink-jet printing method by treating the paper or the paper products with aqueous solutions of cationic polymers, wherein cationic polymers comprising vinylamine units and having a charge density of at least 3 meq/g are used as the sole treatment composition in aqueous solution and said composition is applied in an amount of from 0.05 to 5 g/m² to the surface of the paper or of the paper product.
- The process according to claim 1, wherein the charge density of the polycation in the polymer comprising vinylamine units is from 3.5 to 23 meq/g.
- 3. The process according to claim 1, wherein the charge density of the polycation in the polymer comprising vinylamine units is from 8 to 20 meq/g.
 - 4. The process according to any of claims 1 to 3, wherein the polycation of the polymer comprising vinylamine units has a molar mass $M_{\rm w}$ of at least 10 000.
- The process according to any of claims 1 to 4, wherein the polymers comprising vinylamine units used are hydrolyzed homo- or copolymers of N-vinylformamide having a degree of hydrolysis of from 20 to 100%.
- 6. The process according to any of claims 1 to 5, wherein the aqueous solution of the polymers comprising vinylamine units is applied to the paper with the aid of a size press, a film press, a spraying means, a coating unit or a paper calender.
 - 7. A paper which is obtainable by the process according to claims 1 to 6.
- 30 8. The use of an aqueous solution which comprises, as cationic polymers, polymers comprising vinylamine units and having a charge density of at least 3 meq/g as the sole treatment composition, for application to the surface of paper or paper products in an amount of from 0.05 to 5 g of cationic polymer per m² for improving the ink-jet printability of paper and paper products.